Wiley Rein & Fielding LLP

1776 K STREET NW
WASHINGTON, DC 20006
PHONE 202.719.7000
FAX 202.719.7049

Virginia Office
7925 JONES BRANCH DRIVE
SUITE 6200
McLEAN, VA 22102
PHONE 703.905.2800
FAX 703.905.2820

www.wrf.com

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Peter D. Shields
202.719.3249
pshields@wrf.com

**FILED ELECTRONICALLY**

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Ex Parte Presentation in IB Docket No. 02-364

Dear Ms. Dortch:

In this letter, Iridium responds to the questions raised by the Commission's staff in our June 1, 2004 ex parte meeting[1] and Globalstar's assertions made in recent ex parte filings.

**Question 1: Are there FAA/RTCA regulations that require aviation services to operate above 1616 MHz?**

**Answer: There are no FAA/RTCA regulations that require aviation service operations only above 1616 MHz.** Iridium has reviewed FAA/RTCA documents and states emphatically that none of the documents provided by Globalstar nor any of the other documents reviewed by Iridium require aviation services to operate above 1616 MHz. In fact, the "in-band and transition harmonic spurious and noise requirements" within RTCA\DO-262 are specifically relaxed for equipment operating within the band of interest as summarized in table 2.6 of this document. In its most recent ex parte filing dated June 1, 2004, Globalstar alleges, for the first time, that RTCA\DO-228 has an interference level requirement that limits the operational bands for Globalstar. However, RTCA\DO-228 is simply the minimum operational performance standard for global navigation satellite system equipment. It contains *no* interference level requirements for MSS systems, rather it contains only equipment requirements for global navigation systems. Finally, it is clear in the June 1, 2004 ex parte presentation that Globalstar could prevent its out of band emissions from interfering in spectrum below 1614 MHz if it employed better filter technology, an option it apparently has rejected for its own reasons.

Globalstar's sole argument for maintaining exclusive access to spectrum above 1616 MHz is to provide future aviation services. Globalstar, however, has provided

[1] *See* Iridium's ex parte notification letter filed under separate cover today in IB Docket No. 02-364.

no showing that such services would be adversely affected by limiting its operations below 1616 MHz. As such, it is clear that all of Globalstar's services can be readily accommodated in spectrum below 1616 MHz, by Globalstar's own admission. In any event, Iridium's proposed band plan would provide ample spectrum above 1616 MHz to Globalstar on a shared basis.

**Question 2: Does Globalstar require two channels, exclusively for aviation communications needs?**

**Answer: Globalstar has provided no documentation for its requirement for two "unshared" channels above 1616 MHz.** As Iridium has consistently stated, Globalstar's current system configuration and operations have been designed to occupy the maximum amount of spectrum possible, regardless of the efficiency or effectiveness of such a byzantine structure. Globalstar has suggested that it requires two exclusive channels for prospective aviation services. Iridium notes that Globalstar's June 1, 2004 ex parte states that it is "actively marketing" aviation services, so Globalstar is seeking to protect, at best, potential service offerings. At this time, Globalstar is therefore seeking to reserve almost 5 MHz of spectrum (2 paired, 1.23 MHz channels) for future services for which it does not have a single customer. In contrast, Iridium has been utilizing just slightly more than 6 MHz of spectrum, as supplemented by STA, for all of its services, including aviation, individual user, vehicle, paging, maritime and data. Iridium's current provision of aviation services within its existing spectrum clearly undermines any claims that two channels of exclusive spectrum is necessary for aviation services alone.

Iridium also discussed with Commission staff Globalstar's contention that Doppler shift/effects required two unshared channels above 1616 MHz. Iridium, as an NGSO entity, is extremely familiar with Doppler shift as it must correct for this. NGSO satellites move on the order of 16,000 mph when compared to the Earth. In contrast, even the most rapid aircraft is unlikely to exceed 700 mph and is therefore relatively slow compared to the satellite. Doppler effects are irrelevant with respect to the amount of bandwidth necessary for aviation services because the two systems already compensate for Doppler in a far more significant way when considering the movement between the satellite and the ground. Globalstar's most recent ex parte appears to drop this specious claim.

**Question 3: Is GLONASS an issue for Globalstar operations?**

**Answer: GLONASS is not an issue for Globalstar operations.** Since 1998, GLONASS has lowered the operating frequency range by more than 7 MHz and will have shifted downward more than a total of 10 MHz by 2005. These frequency shifts have created 10 MHz of separation between GLONASS and Globalstar operations thereby eliminating any interference concerns. This is confirmed by Globalstar's June 1 ex parte presentation, which states that Globalstar's handsets are not even designed to take into account GLONASS.

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As documented herein and in Iridium's prior filings, Globalstar continues to inefficiently and artificially segregate its spectrum use geographically and spectrally to justify its need for additional spectrum. Globalstar's arguments, to justify its artificial segregation of vast amounts of Big LEO spectrum, have no technical basis. Furthermore, any allegations about the impact of FAA/RTCA, aviation service or GLONASS requirements have been refuted by the facts provided by Iridium.

Globalstar's continued allegations that Iridium has not demonstrated a need for additional spectrum were rebutted. It is unfathomable that Globalstar, with exclusive use of 27 MHz of spectrum, can argue that Iridium is spectrally inefficient considering that Iridium supported more than 1.5 times the traffic of Globalstar globally in 2003 with less than a quarter of the spectrum. Furthermore, Iridium continues to experience spectral capacity limitations and has continued to demonstrate the actual, real-world effects that its limited spectrum access has had on its business operations. As it has argued to the Comission since 1999, access to additional spectrum is the only way that Iridium can continue to provide high quality service to its burgeoning customer base, a fact that has been borne out in the Alaska and Western United States regions, among others, as well as in the Middle East.

In sum, Iridium continues to have a pressing need for an additional 5.35 MHz of Big LEO spectrum. As it has consistently demonstrated to the Commission, Iridium is using its limited spectral capacity in a thorough and efficient fashion and has provided detailed documentation concerning its need for additional spectrum.

Pursuant to Section 1.1206(b)(2), a copy of this letter is being filed electronically and copies are being e-mailed to the Commission staff identified below.

Sincerely,

/s/ Peter D. Shields
Peter D. Shields

cc: Sheryl Wilkerson
Jennifer Manner
Stacy Fuller
Sam Feder
Paul Margie
Barry Ohlson
Rick Engelman
Breck Blalock